



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/716,045	11/20/2000	David Carl		7606

24000 7590 03/28/2002

CALHOUN & HAASE
2701 REGIONS CENTER
400 WEST CAPITOL AVENUE
LITTLE ROCK, AR 72201

EXAMINER

SUHOL, DMITRY

ART UNIT	PAPER NUMBER
----------	--------------

3712

DATE MAILED: 03/28/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,045

Applicant(s)

CARL ET AL.

Examiner

Dmitry Suhol

Art Unit

3712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

The drawings are objected to because elements 11, 16, and 32 referred to in the specification on pages 5, 6, and 9 therein are not shown in the figures. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-7, 10-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, there is no antecedent basis for "said primary wall".

Regarding claim 7, the structural relationships encompassed by the phrase "fans being controllable depending on the diameter of said chamber" can't be determined, rendering the claim indefinite. It is unclear as to how the control of the fans is dependent on the diameter of the chamber.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kitchen (U.S. Patent No. 5,655,909). Kitchen discloses a free fall simulator containing all the elements of the claims including, a cylindrical wall defining a chamber as required by claim 1 (figs. 4 and 5, element 4), means for generating a column of air under pressure in a chamber as required by claim 1 (col. 2, lines 21-23), a column of air moving from bottom to top as required by claim 1 (col. 2, lines 21-23), a pressure being sufficient to support one flyer therein as required by claim 1 (fig. 2), a wall having a surface and the surface being contiguous with and defining a diameter of a column as required by claim 1 (fig. 2, elements 4 and 22), a surface of a wall being smooth such that a column of air moves in laminar flow in at least an upstream portion of column of air as required by claim 1 (figs. 2 and 3) where the lower portion of the wall shown in fig. 2 below the flyer is shown as smooth thus allowing a laminar flow of air.

Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Methfessel. Methfessel discloses a free fall simulator containing all the elements of the claims including, a cylindrical wall defining a chamber as required by claim 1 (fig. 4, element 402), means for generating a column of air under pressure in a chamber as required by claim 1 (fig. 4, element 28), a column of air moving from bottom to top as

Art Unit: 3712

required by claim 1 (col. 4, lines 54-59), a pressure being sufficient to support one flyer therein as required by claim 1 (col. 4, lines 60-65), a wall having a surface and the surface being contiguous with and defining a diameter of a column as required by claim 1 (fig. 4, element 402), a surface of a wall being smooth such that a column of air moves in laminar flow in at least an upstream portion of column of air as required by claim 1 (figs. 4, element 402). Methfessel further discloses a camera being remotely positionable as required by claims 3 and 11 (col. 10, lines 9-13).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 6-7, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Methfessel in view of Louttit. Methfessel discloses all the elements of the claims as stated above, and including a secondary wall having a diameter less than a primary wall such that the placement of secondary wall centrally within a chamber will reduce a diameter of a column of air as required by claim 6 (fig. 4, element 402).

Although Methfessel discloses most of the elements of the claims the reference fails to teach a diameter of a column of air being variable within a chamber as required by claim 2, an air generating means is a series of contiguous fans wherein the fans are controllable as required by claims 7 and 12. However, Louttit discloses a device like that

Art Unit: 3712

of Methfessel which teaches an air generating means being a series of contiguous fans wherein the fans are controllable (fig. 2, elements 22, 23 and page 2, lines 6-11) and a diameter of a column of air being variable within a chamber, where it is considered that the diameter of a column of air can be varied by turning the individual fan motors on and off. Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, in view of Louttit, to manufacture the device of Methfessel with a series of controllable contiguous fans for the purpose of regulating air speed and extending equipment life.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kitchen. Although Kitchen discloses most of the elements of the claims, as stated above, the reference fails to teach a surface of an inner wall being of a pastel color as required by claim 4. However, Kitchen teaches a projection screen which displays images associated with skydiving (fig. 2, element 24). It would have been obvious to have an inner wall being of a pastel color for substituting "blue screen" technology for the projection screen of Kitchen since the examiner takes Official Notice of the equivalence of a projection screen and "blue screen" technology, for the purpose of showing related images and interest to the user, in the virtual reality art and the selection of any of these known equivalents to provide a virtual reality environment would be within the level of ordinary skill in the art.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Methfessel in view of Hoyt. Although Methfessel discloses most of the elements of the claims, as stated above, the reference fails to teach a surface of an inner wall being of a pastel color as required by claim 4. However, Hoyt teaches the use of "blue screen" technology in amusement devices for simulating the background of a photograph (col. 1, lines 43-65). Therefore it would have been obvious to manufacture the device of Methfessel with an inner wall of pastel color for the purpose of incorporating "blue screen" technology with the video system of Methfessel for the purpose of interest and amusement to the consumer.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Methfessel in view of Howell. Although Methfessel discloses all of the elements of the claims as stated above, the reference fails to teach, a circular track provided in a chamber as required by claim 5, and a camera mounted for movement around a circular track such that it is movable to capture flyers on film or tape at any location and at any angle within a chamber as required by claim 5. However, Howell discloses a device like that of Kitchen which teaches a circular track with a movable camera, the track being attachable to a vertical or horizontal surface for videotaping a scene from a variety of angles (fig. 1 and col. 6, lines 17-21). Therefore it would have been obvious, in view of Howell, to substitute the tracks and video system of Howell in the interior portion of a chamber for the camera system of Methfessel for the purpose of reduced cost and ability to videotape the flyer from a variety of angles.

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Methfessel in view of Lenhart. Although Methfessel discloses most of the elements of the claims, as stated above, the reference fails to teach a goal within a chamber as required by claim 8, and pairs of opposed goals within a chamber as required by claim 9. However, Lenhart discloses a free fall simulator which teaches a goal within a chamber (fig. 2, element 36) and pairs of opposed goals within a chamber (fig. 3, element 36). Therefore it would have been obvious, in view of Lenhart, to manufacture the device of Methfessel with a goal or pairs of opposed goals within a chamber for the purpose of providing an amusing game environment.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Methfessel and Louttit, as stated above, in view of Hoyt. Methfessel, as modified by Louttit, discloses most of the elements of the claims but for a surface of an inner wall being of a pastel color as required by claim 10. However, Hoyt teaches the use of "blue screen" technology in amusement devices for simulating the background of a photograph (col. 1, lines 43-65). Therefore it would have been obvious to manufacture the device of Methfessel with an inner wall of pastel color for the purpose of incorporating "blue screen" technology with the video system of Methfessel for the purpose of interest and amusement to the consumer.

Conclusion

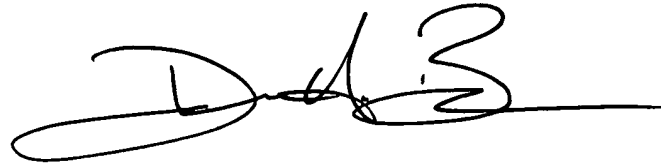
Art Unit: 3712

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 703-305-0085. The examiner can normally be reached on Mon - Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 703-308-1745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

ds
March 22, 2002

A handwritten signature in black ink, appearing to read 'DHB', with a long horizontal line extending to the right.

**DERRIS H. BANKS
PRIMARY EXAMINER**